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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,114	07/11/2001	Devendra Kumar	FSI0006/US/2	9548

33072 7590 07/14/2003

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EXAMINER
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TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 07/14/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/903,114

Applicant(s)

KUMAR ET AL.

Examin r

Brian K Talbot

Art Unit

1762

-- Th MAILING DATE of this c mmunication app ars on th cover sh t with th correspond nc address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 49-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 49-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/3/03 has been entered.
2. The 35 USC 103 rejections over Yang et al., Yoshioka et al. and Boas et al. have been withdrawn.
3. Claims 49-52 have been added. Claims 1-37 and 49-52 remain in the application.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-37 and 49-52 rejected under 35 U.S.C. 102(e) as being anticipated by clearly anticipated by Womack et al. (6,307,184).

Womack et al. (6,307,184) teaches thermal processing chamber for heating and cooling wafer-like objects. Womack et al. (6,307,184) teaches a dielectric coating being thermally processed and then cooled to cure. The wafer is cooled in an anaerobic atmosphere.

***Claim Rejections - 35 USC § 103***

5. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the ~~inventor of this application and is thus not the invention "by another," or by an appropriate~~ showing under 37 CFR 1.131.

Claims 1-38 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sava (6,198,074), Armstrong et al. (6,072,163) or Akimoto et al. (5,620,560) in view of Womack et al. (6,307,184).

Sava (6,198,074) teaches a system and method for rapid thermal processing with transitional heater. A substrate is heated and then cooled before removal from the chamber/system (abstract). Armstrong et al. (6,072,163) teaches a combination bake/chill apparatus for baking and chilling photoresists. The bake/chill is performed prior to removal of

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the wafer from the system (abstract and col. 1, lines 20-65). Akimoto et al. (5,620,560) teaches heat-treating a resist coated substrate whereby the wafer is heated and cooled in the same chamber prior to being removed from the substrate (abstract and Figs. 13,16).

Sava (6,198,074), or Armstrong et al. (6,072,163) or Akimoto et al. (5,620,560) fails to teach thermal curing in an anaerobic atmosphere.

Womack et al. (6,307,184) teaches thermal curing in an anaerobic atmosphere.

Therefore, it would have been obvious at the time the invention was made to have modified Sava (6,198,074), Armstrong et al. (6,072,163) or Akimoto et al. process by thermally curing in an anaerobic atmosphere as evidenced by Womack et al. (6,307,184) with the advantages associated therewith, i.e. reducing thermal risk and forming the desired cured product.

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6. ~~Any inquiry concerning this communication or earlier communications from the~~  
examiner should be directed to Brian K Talbot whose telephone number is (703) 305-3775. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3775.

A handwritten signature in black ink, appearing to read "B-K Talbot", with a long, sweeping horizontal stroke extending to the right.

Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT  
July 9, 2003

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